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 DT 02-SEP-2002 (Rel. 72, Last updated, Version 5)
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 RX PUBMED; 10192388.
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 RA Olinger L., Grimwood J., Davis R.W., Stephens R.S.;
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ttcttactt	16448

//

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 101768

Fulltext Availability:

Detailed Description

Detailed Description

... G)

Campylobacterjejuni NCTC 11 168 Y17167 tuf
Campylobacterjejuni NCTC 11 168 CJ11168X2 tuf (EF-G)
Chlamydia pneumoniae CWL029 AE001592 tuf
Chlamydia pneumoniae CWL029 AE001639 tuf (EF-G)
Chlamydia trachomatis M74221 tuf
Chlamydia trachomatis D/UW-3/CX AE001317 tuf (EF-G)
Chlamydia trachomatis D/UW-3/CX...81-176 U03121 recA
Campylobacterjejuni NCTC 11 168 AL139079 recA
Chlamydia trachomatis L2 U16739 recA
Chlamydia trachomatis D/UW-3/CX AE001335 recA
Chlamydophila pneumoniae CWL029 AE001658 recA
Chloroflexus aurantiacus J-1041 AF037259 recA
Clostridium acetobutylicum M94057 recA
Clostridium perfringens 13...

1/3, KWIC/14 (Item 10 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00778694

ISOPRENOID BIOSYNTHESIS

BIOSYNTHÈSE D'ISOPRENOÏDES

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200111055 A1 20010215 (WO 0111055)

YSTEM:OS - DIALOG OneSearch
File 155: MEDLINE(R) 1966-2002/Sep W5
*File 155: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT.
File 349:PCT FULLTEXT 1983-2002/UB=20021003,UT=20020926
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File 5:Biosis Previews(R) 1969-2002/Oct W1
(c) 2002 BIOSIS
*File 5: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT.
File 73:EMBASE 1974-2002/Oct W1
(c) 2002 Elsevier Science B.V.
*File 73: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT.

Set Items Description
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Cost is in DialUnits
?ds

Set Items Description
S1 24 CWL029 (10N) CHLAMYDI?
S2 16 RD (unique items)
?t s1/3,kwic/5-16

1/3,KWIC/5 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00841553 **Image available**

CHLAMYDIA TRANSMEMBRANE PROTEIN AS ANTIGEN, CORRESPONDING DNA FRAGMENTS AND USES THEREOF
ANTIGENES DE S1(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS, ET LEUR UTILISATION

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all designated states except: US)

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200175114 A2-A3 20011011 (WO 0175114)

Application: WO 2001CA462 20010404 (PCT/WO CA0100462)

Priority Application: US 2000194477 20000404

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18024

Fulltext Availability:

Detailed Description

Detailed Description

... PCACPBM643 containing the transmembrane protein gene.

The myosin heavy chain homolog gene was amplified from **Chlamydia pneumoniae** genomic DNA strain **CWL029** by polymerase chain reaction (PCR) using a 5' primer

(

1/3, KWIC/6 (Item 2 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00841552 **Image available**

CHLAMYDIA MYOSIN HEAVY CHAIN HOMOLOG AS ANTIGEN, CORRESPONDING DNA FRAGMENTS AND USES THEREOF

ANTIGENES DE CHLAMYDIA, FRAGMENTS CORRESPONDANTS D'ADN, ET LEURS UTILISATIONS

Patent Applicant/Assignee:

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Patent Applicant/Inventor:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200175113 A2-A3 20011011 (WO 0175113)

Application: WO 2001CA461 20010404 (PCT/WO CA0100461)

Priority Application: US 2000194475 20000404

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18028

Fulltext Availability:

Detailed Description

Detailed Description

... the myosin heavy chain homolog gene.

The myosin heavy chain homolog gene was amplified from **Chlamydia pneumoniae** genomic DNA strain **CWL029** by polymerase chain reaction (PCR) using a 5' primer
(5' ATAAGAATGCGGCCACCATGCATGACGCACTTCTAAGCA 3'; SEQ ID No...)

1/3, KWIC/7 (Item 3 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00841551 **Image available**

CHLAMYDIA ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF

ANTIGENE <I>CHLAMYDIA</I>, FRAGMENTS D'ADN CORRESPONDANTS, ET LEURS UTILISATIONS

Patent Applicant/Assignee:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200175112 A2-A3 20011011 (WO 0175112)

Application: WO 2001CA460 20010404 (PCT/WO CA0100460)

Priority Application: US 2000194472 20000404

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18044

Fulltext Availability:

[Detailed Description](#)

Detailed Description

... pCACP NM653 containing the glutamate binding protein
gene.

The glutamate binding protein gene was amplified from
Chlamydia pneumoniae genomic DNA strain **CWL029** by polymerase
chain reaction (PCR) using a 51 primer
(51 ATAAGAATGC GCGCC ACCATGAAGATAAAATTCTTGGAGG 3'; SEQ ID
No...).

1/3, KWIC/8 (Item 4 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00841550 **Image available**

CHLAMYDIA ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
ANTIGENES DE CHLAMYDIA ET FRAGMENTS D'ADN CORRESPONDANTS, ET UTILISATIONS
DE CEUX-CI

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Patent Applicant/Inventor:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200175111 A2-A3 20011011 (WO 0175111)

Application: WO 2001CA456 20010404 (PCT/WO CA0100456)

Priority Application: US 2000194471 20000404

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18039

Fulltext Availability:

[Detailed Description](#)

Detailed Description

... pCACPNM760 containing the myosin heavy chain gene.

The myosin heavy chain gene was amplified from

Chlamydia pneumoniae genomic DNA strain **CWL029** by polymerase chain reaction (PCR) using a 51 primer

(5' ATAAGAATGCAGCCGCCACCATGGCAAAATATCCACTAGAGCC 31; SEQ ID

No...).

1/3, KWIC/9 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00841504 **Image available**

CHLAMYDIA ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
ANTIGENES DE CHLAMYDIA, FRAGMENTS D'ADN CORRESPONDANTS, ET UTILISATIONS
DES DITS FRAGMENTS

Patent Applicant/Assignee:

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all designated states except: US)

Patent Applicant/Inventor:

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, CA (Residence), GB (Nationality), (Designated only for: US)

OOMEN Raymond P, 29 Kennedy Street W., Aurora, Ontario L4G 2L6, CA, CA
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(Residence), CA (Nationality), (Designated only for: US)

DUNN Pamela, 97 Rosebury Lane, Woodbridge, Ontario L4L 3Z1, CA, CA
(Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

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P.O. Box 2999, Station D, Ottawa, Ontario K1P 5Y6, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200174863 A2-A3 20011011 (WO 0174863)

Application: WO 2001CA455 20010404 (PCT/WO CA0100455)

Priority Application: US 2000194464 20000404

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18015

Fulltext Availability:
Detailed Description

Detailed Description

... pCACPNM209 containing the ATP-binding cassette gene.

The ATP-binding cassette gene was amplified from **Chlamydia** pneumoniae genomic DNA strain **CWL029** by polymerase chain reaction (PCR) using a 51 primer
51 ATAAGAATGCGGCCGCCACCATGCGCAAGATATCAGTGGGAATC 3'; SEQ ID No...

1/3,KWIC/10 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00812849 **Image available**

CHLAMYDIA ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
ANTIGENES DE CHLAMYDIA, FRAGMENTS D'ADN CORRESPONDANTS ET UTILISATIONS DE
CEUX-CI

Patent Applicant/Assignee:

AVENTIS PASTEUR LIMITED, Connaught Campus, 1755 Steeles Avenue West,
Toronto, Ontario M2R 3T4, CA, CA (Residence), CA (Nationality), (For
all designated states except: US)

Patent Applicant/Inventor:

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OOMEN Raymond P, 29 Kennedy Street W., Aurora, Ontario L4G 2L6, CA, CA
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(Residence), CA (Nationality), (Designated only for: US)

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(Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

MORROW Joy D (et al) (agent), Smart & Biggar, 900-55 Metcalfe Street,
Station D, P.O. Box 2999, Ottawa, Ontario K1P 5Y6, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200146226 A2-A3 20010628 (WO 0146226)

Application: WO 2000CA1536 20001220 (PCT/WO CA0001536)

Priority Application: US 99171538 19991222

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 16495

Fulltext Availability:

Detailed Description

Detailed Description

... plasmid

vector pCABk099 containing the membrane ATPase gene.
The membrane ATPase gene was amplified from **Chlamydia** pneumoniae genomic DNA strain **CWL029** by polymerase chain reaction (PCR) using a 51 primer
(5f ATAAGAATGCGGCCGCCACCATGCGCAAAACATCTACACAAAAATAAC 3r; SEQ ID No...)

1/3,KWIC/11 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00812848 **Image available**

**CHLAMYDIA ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
ANTIGENES ANTI-CHLAMYDIA, FRAGMENTS D'ADN CORRESPONDANTS ET LEURS
UTILISATIONS**

Patent Applicant/Assignee:

AVENTIS PASTEUR LIMITED, Connaught Campus, 1755 Steeles Avenue West,
Toronto, Ontario M2R 3T4, CA, CA (Residence), CA (Nationality), (For
all designated states except: US)

Patent Applicant/Inventor:

MURDIN Andrew D, 11 Forest Hill Drive, Richmond Hill, Ontario L4B 3C2, CA
, CA (Residence), GB (Nationality), (Designated only for: US)
OOMEN Raymond P, 29 Kennedy Street West, Aurora, Ontario L4G 2L6, CA, CA
(Residence), CA (Nationality), (Designated only for: US)
WANG Joe, 51 Aspenwood Drive, Toronto, Ontario M2H 2E8, CA, CA
(Residence), CA (Nationality), (Designated only for: US)
DUNN Pamela, 97 Rosebury Lane, Woodbridge, Ontario L4L 3Z1, CA, CA
(Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

MORROW Joy D (et al) (agent), Smart & Biggar, P.O. Box 2999, Station D,
900-55 Metcalfe Street, Ottawa, Ontario K1P 5Y6, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200146225 A2-A3 20010628 (WO 0146225)

Application: WO 2000CA1535 20001220 (PCT/WO CA0001535)

Priority Application: US 99171539 19991222

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 16393

Fulltext Availability:

[Detailed Description](#)

Detailed Description

... pcABk319 containing the outer membrane protein gene.

The outer membrane protein gene was amplified from
Chlamydia pneumoniae genomic DNA strain **CWL029** by polymerase
chain reaction (PCR) using a 5' primer
(5' ATAAGAATGCGGCCGCCACCATGAAAAAATTATTATTCTAC 3'; SEQ ID
No...).

1/3, KWIC/12 (Item 8 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00810074

**COMPLEMENTARY PEPTIDE LIGANDS GENERATED FROM MICROBIAL GENOME SEQUENCES
LIGANDS PEPTIDIQUES COMPLEMENTAIRES PRODUITS A PARTIR DE SEQUENCES
GENOMIQUES MICROBIENNES**

Patent Applicant/Assignee:

PROTEOM LIMITED, Babraham Hall, Babraham, Cambridge CB2 4AT, GB, GB
(Residence), GB (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

ROBERTS Gareth Wyn, The Grange, Church Street, Great Shelford, Cambridge
CB2 5EL, GB, GB (Residence), GB (Nationality), (Designated only for:
US)

HEAL Jonathan Richard, 21 Fingal Street, Greenwich, London SE10 0JL, GB,
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Legal Representative:

DAVIES Jonathan Mark (agent), Reddie & Grose, 16 Theobalds Road, London

WC1X 8PL, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200142278 A2-A3 20010614 (WO 0142278)

Application: WO 2000GB4778 20001213 (PCT/WO GB0004778)

Priority Application: GB 9929466 19991213

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 10697

Fulltext Availability:

Detailed Description

Detailed Description

... et al., Nature,

Genorne Size (Mb) 1.44 s/SplashPage.html 390: 580-586 (1997)

Chlamydia pneumoniae CWL029 B Acute respiratory infections and

http://Chlarnydia- Kalman et al., Nat Genorne Size (Mb) 1...

1/3, KWIC/13 (Item 9 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00791380 **Image available**

HIGHLY CONSERVED GENES AND THEIR USE TO GENERATE PROBES AND PRIMERS FOR
DETECTION OF MICROORGANISMS

GENES A FORT POUVOIR DE CONSERVATION ET LEUR UTILISATION POUR PRODUIRE DES
SONDES D'ACIDE NUCLEIQUE SPECIFIQUES A L'ESPECE, SPECIFIQUES AU GENE,
SPECIFIQUES A LA FAMILLE, SPECIFIQUES AU GROUPE ET UNIVERSELLES ET DES
SONDES D'AMPLIFICATION, EN VUE DE DETECTER ET D'IDENTIFIER RAPIDEMENT
DES MICRO-ORGANISMES ALGAIRES, ARCHEOBA

Patent Applicant/Assignee:

INFECTIO DIAGNOSTIC (I D I) INC, 2050 Rene-Levesque Blvd., West, 4th
Floor, Sainte-Foy, Quebec G1V 2K8, CA, CA (Residence), CA (Nationality)
, (For all designated states except: US)

Patent Applicant/Inventor:

BERGERON Michel G, 1145 des Erables, Quebec, Quebec G2K 1T8, CA, CA
(Residence), CA (Nationality), (Designated only for: US)

BOISSINOT Maurice, 109 Jean Bruchesi, St-Augustin-de-Desmaures, Quebec
G3A 2N2, CA, CA (Residence), CA (Nationality), (Designated only for:
US)

HULETSKY Ann, 1231 des Pins Avenue, Sillery, Quebec G1S 4J3, CA, CA
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MENARD Christian, 1174 du Pont, St-Lambert-de-Levis, Quebec G0S 2W0, CA,
CA (Residence), CA (Nationality), (Designated only for: US)

OUELLETTE Marc, 1035 de Ploermel, Sillery, Quebec G1S 3S1, CA, CA
(Residence), CA (Nationality), (Designated only for: US)

PICARD Francois J, 1245 de la Sapiniere, Cap-Rouge, Quebec G1Y 1A1, CA,
CA (Residence), CA (Nationality), (Designated only for: US)

ROY Paul H, 28 Charles Garnier, Loretteville, Quebec G2A 2X8, CA, CA
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

DUBUC Jean H (et al) (agent), Goudreau Gage Dubuc, The Stock Exchange
Tower, 800 Place Victoria, Suite 3400, P.O. Box 242, Montreal, Quebec
H4Z 1E9, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200123604 A2-A3 20010405 (WO 0123604)

Application: WO 2000CA1150 20000928 (PCT/WO CA0001150)

Priority Application: CA 2283458 19990928; CA 2307010 20000519

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

Application: WO 2000EP7548 20000803 (PCT/WO EP0007548)
Priority Application: DE 19936663 19990804; DE 19945175 19990921; DE 19945174 19990921; DE 19948887 19991011; DE 19953309 19991105; DE 10020996 20000428

Designated States: AE AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 40376

Fulltext Availability:

Detailed Description

Detailed Description

... trachomatis D/UW-3/CX C.T. gb AE00 1 320, 3348-4007 gb AE
Chlamydia pneumoniae CWL029 c. P. gb AE001642, 7155-7790 gb AE
Thermotoga maritima T. M. gb AE001792, 3951...AE000713, 10428-11234
Chlamydia trachomatis D/UW-3/CX C.T. gb AE001352, 9579-10445
Chlamydia pneumoniae CWL029 c. P. gb AE001675, 2514-3406
Thermotoga maritima T. M. gb AE001791.1, 13364-14179...

1/3, KWIC/15 (Item 11 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00757848

NUCLEIC ACID PROBE-BASED DIAGNOSTIC ASSAYS FOR PROKARYOTIC AND EUKARYOTIC ORGANISMS

DOSAGES DIAGNOSTIQUES D'ACIDES NUCLEIQUES PAR SONDE POUR ORGANISMES PROCARYOTES ET EUKARYOTES

Patent Applicant/Assignee:

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NATIONAL UNIVERSITY OF IRELAND GALWAY, University Road, Galway, IE, IE (Residence), IE (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

BARRY Thomas Gerard, The Quay, Kinvara, County Galway, IE, IE (Residence), IE (Nationality), (Designated only for: US)

SMITH Terence James, 18 Hawthorne Place, Clybaun Road, Galway, IE, IE (Residence), IE (Nationality), (Designated only for: US)

Legal Representative:

ANNE RYAN & CO (agent), 60 Northumberland Road, Ballsbridge, Dublin 4, IE

Patent and Priority Information (Country, Number, Date):

Patent: WO 200070086 A1 20001123 (WO 0070086)

Application: WO 2000IE66 20000515 (PCT/WO IE0000066)

Priority Application: WO 99IE43 19990514

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 23736

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... ID NO: 159

Bordetella bronchiseptica tmRNA
GGGGCGGAUCGGGAUUCGACGUGGGUCAUGAAACAGCUAAGGC
20 AUGCCGAGCACCAGUAAGCUCGUTJAAUCCACUGGAACACUACAA
ACGCCAACGACGAGCGUUUCGCUCUCGCCGUUAAGCGGUGAGC
CGCUGCACUGAUCUGUCCUUGGGUCACGCGGGGGAA

SEQ ID NO: 160

Chlamydiapneumoniae (CWL029), *ssrA*
GGGGGTGTATAGGTTTCGACTTGAAAATGAAGTGTAAATTGCAT
GCGGAGGGCGTGGCTGGCTCCTAAAAAGCCAACAAAACAATA
AATGCCAACCTAAGGCTGAATGCGAAATTATTAGCTTGTGTTGA
CTCAGTAGAGGAAAGACTAGCTGCTTAATTAGCAAAAGTTGTTA
GCTAGATAATCTCTAGGTAAACCCGTATCTGCGAGCTCCACCAG
AGGCTTGCAAAATACCGTCATTATCTGGTTGAACTTACTTCT
CTAATTCTCAAGGAAGTTCGTCGAGATTTTGAGAGTCATTGGC
TGCTATAGAGGCTCTAGCTAAGGGAGTCCAATGTAAACAATTC
10 TAGAAGATAAGCATGTAGAGGTTAGCAGGGAGTTGTCAAGGAC
GAGAGTTCGAGTCTCTCACCTCCACCA SEQ ID NO: 161

Chlamydiapneumoniae (CWL029) tmRNA
GGGGGUGUAUAGGUUUCGACUUGAAAAUGAAGUGUAAAUGC
15 AUGCGGAGGGCGUJGGCUGGCCUAAAAGCCAACAAAACA
AUAAAUGCCGAACCUAAGGCUGAAUGCAGAAUUAAGCAAAA
UUUGACUCAGUAGAGGAAAGACUAGCUGCUUAAUUAAGCAAAA
GUUGUUAGCUAGAUAAUCUCUAGGUACCCGGUAUCUGCGAG
CUCCACCAGAGGCUUGCAAAUACCGUCAUUUAUCUGGUUGGA
20 ACUUACUUUCUCUAAUUCUCAAGGAAGUUCGUUCGAGAUUUU
UGAGAGCUAUJGGCUGCUAUAGAGGCUUCUAGCUAGGGAGU
CCAAUGUAAACAAUUCUAGAAGUAAGCAUGUAGAGGUJAGC
AGGGAGUUUGCUAAGGACGAGAGUUCGUUCUCCACCUCCA
CCA SEQ...

Claim

... ucucgccgcu 120

uaagcgguga gccgcugcac ugaucugucc uugggucacg cgggggaa 168

<210> 161

<211> 426

<212> DNA

<213> *Chlamydia pneumoniae* (CWL029)

<400> 161

gggggtgtat aggttcgac ttgaaaatga agtgttaatt gcatgcggag ggcgttgct 60

ggcctcctaa aaagccaaca aaacaataaa tgccgaacct aaggctgaat gcgaaattat...

agaggttagc agggagtttgc tcaaggacga gagttcgagt ctctccacct 420

ccacca 426

<210> 162

<211> 426

<212> RNA

<213> *Chlamydia pneumoniae* (CWL029)

<400> 162

ggggguguau agguuucgac uugaaaauga aguguuaauu gcaugcggag gqcgugcu 60

qgccuccuaa aaagccaaca aaacaauaaa ugccgaaccu aaggcugaaau gcgaaauuuau...

1/3, KWIC/16 (Item 12 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00733372

MEDICAMENT

MEDICAMENT

Patent Applicant/Assignee:

NEUTEC PHARMA PLC, St. James's Court, Brown Street, Manchester, Cheshire
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MATTHEWS Ruth Christine, 1 Greystoke Drive, Alderley Edge, Cheshire SK9
7PY, GB, GB (Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

MCNEIGHT & LAWRENCE, Regent House, Heaton Lane, Stockport, Cheshire SK4
1BS, GB

Patent and Priority Information (Country, Number, Date):

Patent: WO 200046359 A2 20000810 (WO 0046359)

Application: WO 2000GB237 20000128 (PCT/WO GB0000237)

Priority Application: GB 992555 19990205

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7984

Fulltext Availability:

[Detailed Description](#)

[Detailed Description](#)

... the present invention and the amino acid sequence it encodes are already known from the **Chlamydia** Genome Project (*C. pneumoniae* **CWL029** /CPn0809), as is an apparent *C. trachomatis* homologue (CT578). However, therapeutic and diagnostic uses for...

?logoff hold

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10oct02 14:57:56 User228206 Session D1873.4
  $0.01  0.002 DialUnits File155
$0.01 Estimated cost File155
  $1.80  0.378 DialUnits File349
    $19.20 12 Type(s) in Format  3
      $19.20 12 Types
$21.00 Estimated cost File349
  $0.01  0.002 DialUnits File5
$0.01 Estimated cost File5
  $0.02  0.002 DialUnits File73
$0.02 Estimated cost File73
OneSearch, 4 files,  0.384 DialUnits FileOS
$0.21 TELNET
$21.25 Estimated cost this search
$21.25 Estimated total session cost  0.384 DialUnits
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RESULT 2
 AAY34620
 ID AAY34620 standard; Protein; 348 AA.
 XX
 AC AAY34620;
 XX
 DT 13-SEP-1999 (first entry)
 XX
 DE Chlamydia pneumoniae lipoprotein sequence.
 XX
 KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
 KW vaccine; neutralising epitope.
 OS Chlamydia pneumoniae.
 XX
 PN W09927105-A2.
 XX
 PD 03-JUN-1999.
 XX
 PF 20-NOV-1998; 98WO-IB01890.
 PR 04-NOV-1998; 98US-0107078.
 PR 21-NOV-1997; 97FR-0014673.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-357842/30.
 XX
 PT Genome sequence of Chlamydia pneumoniae
 XX
 PS Page 640; Disclosure; 1912pp; English.
 XX
 CC AAY34584-Y35879 represent the proteins encoded by all the open reading
 CC frames in the complete genome (see AAX91990) of Chlamydia pneumoniae.
 CC C. pneumoniae causes respiratory disease such as pneumonia and
 CC bronchitis and is thought to be a contributing factor in heart
 CC disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the C. pneumoniae genome (see AAY34584-Y35879) can be used in
 CC immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 CC nucleotides sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 XX
 SQ Sequence 348 AA;

Query Match 57.6%; Score 327; DB 20; Length 348;
 Best Local Similarity 100.0%; Pred. No. 6.7e-302;
 Matches 327; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 MGLFHLTLFGLLLCSLPISLVAKFPESVGHKILYISTQSTQALATYLEALDAYGDHDF 60
 Db |||||||fhtlfgl|||cslpislvakfpesvghkilyistqstqqlatylealdaygdhdf 60
 Qy 61 VLRKIGEDYLKQSIHSSDPQTRKSTIIGAGLAGSSEALDVLSQLAMETADPLQQLLVLSAV 120
 Db |||||||vlrkigedylkqsihssdpqtrkstiiigaglagssealdvlsqametadplqqllvlsav 120
 Qy 121 SGHLGKTSDDLLFKALASPPVIRLEAAYRLANLKNTRKVIDHLHSFIHKLPPEIQC 180
 Db 141 sghlgktsddllfkalaspypvirleaaayrlanlkntrkvidhlhsfihklppeiqclsaa 180
 Qy 181 IFLRLETEESDAYIRDLLAAKKSAIRSATALQIGEYQQKRFPLTRNLLTSASPQDQEAI 240
 Db 201 iflrleteesdayirdllaaakkairsatalqigeyqqkrfpltrnlltsaspqdqeai 240
 Qy 241 LYALGKLKDQSYNNIKKQLQKPDVDVTLAAAQALIALGKEEDALPVVIKKQALEERPRAL 300
 Db 261 iyalgk1kdgqsyynikkqlqkpdvdvtlaaaqalialgkeedalpvikkqaleerpral 300
 Qy 301 YALRHLPSSEIGIPIALPIFLKTKNSEA 327
 Db |||||||yalrhlpsseigipialpiflktknsea 327
 Qy 321 yalrhlpsseigipialpiflktknsea 347

RESULT 3

ile 411:DIALINDEX(R)

DIALINDEX(R)
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*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***

?sf allscience

You have 278 files in your file list.

(To see banners, use SHOW FILES command)

?s chlamyd?/ti and vaccin?/ti

Your SELECT statement is:

s chlamyd?/ti and vaccin?/ti

Items	File
84	5: Biosis Previews(R)_1969-2002/Oct W1
1	6: NTIS_1964-2002/Oct W2
8	9: Business & Industry(R)_Jul/1994-2002/Oct 14
38	10: AGRICOLA_70-2002/Oct
38	16: Gale Group PROMT(R)_1990-2002/Oct 14
7	18: Gale Group F&S Index(R)_1988-2002/Oct 14
2	19: Chem. Industry Notes_1974-2002/ISS 200242
10	20: Dialog Global Reporter_1997-2002/Oct 15
59	34: SciSearch(R) Cited Ref Sci_1990-2002/Oct W2
4	35: Dissertation Abs Online_1861-2002/Sep
6	42: Pharmaceutical News Idx_1974-2002/Oct W1
78	50: CAB Abstracts_1972-2002/Sep
30	65: Inside Conferences_1993-2002/Oct W2
21	71: ELSEVIER BIOBASE_1994-2002/Oct W1
56	73: EMBASE_1974-2002/Oct W1
1	74: Int.Pharm.Abs._1970-2002/Sep
3	98: General Sci Abs/Full-Text_1984-2002/Sep
3	99: Wilson Appl. Sci & Tech Abs_1983-2002/Sep

Examined 50 files

>>>Term "TI" is not defined in file 107 and is ignored

13 107: Adis R&D Insight_1986-2002/Oct W1

11 111: TGG Natl.Newspaper Index(SM)_1979-2002/Oct 11

>>>Term "TI" is not defined in file 115 and is ignored

4 115: Research Centers & Services_1994-2002/Jul

>>>Term "TI" is not defined in file 124 and is ignored

1 124: CLAIMS/REFERENCE 2001/2002Q1

>>>Term "TI" is not defined in file 128 and is ignored

19 128: PHARMAPROJECTS_1980-2002/Oct W1

10 129: PHIND(Archival)_1980-2002/Oct W1

2 135: NewsRx Weekly Reports_1995-2002/Oct W1

12 143: Biol. & Agric. Index_1983-2002/Sep

50 144: Pascal_1973-2002/Oct W2

13 148: Gale Group Trade & Industry DB_1976-2002/Oct 15

7 149: TGG Health&Wellness DB(SM)_1976-2002/Oct W1

74 155: MEDLINE(R)_1966-2002/Oct W1

3 156: ToxFile_1965-2002/Oct W2

3 160: Gale Group PROMT(R)_1972-1989

11 162: CAB Health_1983-2002/Sep

>>>Term "TI" is not defined in file 167 and is ignored

1 167: Medical Device Register (R)_1999

1 172: EMBASE Alert_2002/Oct W2

1 174: Pharm-line(R)_1978-2002/Oct W1

3 180: Federal Register_1985-2002/Oct 11

2 185: Zoological Record Online(R)_1978-2002/Sep

>>>Term "TI" is not defined in file 189 and is ignored

13 189: NDA Pipeline: New Drugs_1991-2002/Aug

24 203: AGRIS_1974-2002/May

Examined 100 files

4 266: FEDRIP_2002/Jul

9 285: BioBusiness(R)_1985-1998/Aug W1

>>>Term "TI" is not defined in file 286 and is ignored

36 286: Biocommerce Abs:& Dif._1981-2002/Sep B2

2 315: ChemEng & Biotec Abs_1970-2002/Sep
6 319: Chem Bus NewsBase_1984-2002/Oct 15
18 340: CLAEMS(R) /US Patent_1950-02/Oct 10
47 342: Derwent Patents Citation Indx_1978-01/200225
4 344: Chinese Patents Abs_Aug 1985-2002/Oct
39 345: Inpadoc/Fam.& Legal Stat_1968-2002/UD=200240
1 347: JAPIO_Oct 1976-2002/Jun(Updated 021004)
17 348: EUROPEAN PATENTS_1978-2002/Oct W01
18 349: PCT FULLTEXT_1979-2002/UB=20021010,UT=20021003
96 357: Derwent Biotech Res._1982-2002/JUNE W1

Examined 150 files

2 358: Current BioTech Abs_1983-2002/Sep
1 369: New Scientist_1994-2002/Sep W3
1 371: French Patents_1961-2002/BOPI 200209

>>>Term "TI" is not defined in file 375 and is ignored

1 375: Derwent Drug Registry_1997-2002/Sep W4

>>>Term "TI" is not defined in file 390 and is ignored

40 390: Beilstein Online_
61 399: CA SEARCH(R)_1967-2002/UD=13716
2 429: Adis Newsletters(Archive)_1982-2002/Oct 15
24 434: SciSearch(R) Cited Ref Sci_1974-1989/Dec
983 440: Current Contents Search(R)_1990-2002/Oct 14
5 441: ESPICOM Pharm&Med DEVICE NEWS_2002/Oct W2
14 445: IMS R&D Focus_1991-2002/Oct W1

>>>Term "TI" is not defined in file 453 and is ignored

6 453: Drugs of the Future_1990-2002/Aug
6 455: Drug News & Perspectives_1992-2002/Sep
8 459: Daily Essentials (Archival)_1996-2002/Sep W4
2 484: Periodical Abs Plustext_1986-2002/Oct W1

Examined 200 files

>>>Term "TI" is not defined in file 590 and is ignored

1 590: KOMPASS Western Europe_2002/FEB
2 610: Business Wire_1999-2002/Oct 15
3 613: PR Newswire_1999-2002/Oct 15
8 621: Gale Group New Prod.Annou.(R)_1985-2002/Oct 11
1 635: Business Dateline(R)_1985-2002/Oct 12
29 636: Gale Group Newsletter DB(TM)_1987-2002/Oct 14
1 637: Journal of Commerce_1986-2002/Oct 10
9 649: Gale Group Newswire ASAP(TM)_2002/Oct 10
15 654: US PAT.FULL._1976-2002/Oct 08

Examined 250 files

3 761: Datamonitor Market Res._1992-2002/Oct
1 764: BCC Market Research_1989-2002/Oct
1 765: Frost & Sullivan_1992-1999/Apr
5 767: Frost & Sullivan Market Eng_2002/Sep
1 810: Business Wire_1986-1999/Feb 28
4 813: PR Newswire_1987-1999/Apr 30

83 files have one or more items; file list includes 278 files.

One or more terms were invalid in 90 files.

?save temp
Temp SearchSave "TD611" stored
?rf
Your last SELECT statement was:
S CHLAMYD?/TI AND VACCIN?/TI

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SYSTEM:OS - DIALOG OneSearch
File 155: MEDLINE(R) 1966-2002/Oct W1
*File 155: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.
File 10: AGRICOLA 70-2002/Oct
(c) format only 2002 The Dialog Corporation
File 65: Inside Conferences 1993-2002/Oct W2
(c) 2002 BLDSC all rts. reserv.
File 203: AGRIS 1974-2002/May
Dist by NAL, Intl Copr. All rights reserved
File 636: Gale Group Newsletter DB(TM) 1987-2002/Oct 14
(c) 2002 The Gale Group
File 654: US PAT. FULL. 1976-2002/Oct 08
(c) FORMAT ONLY 2002 THE DIALOG CORP.

*File 654: is redesigned with new search and display features. See
HELP NEWS654 for details. Reassignments current through Jun. 7, 2002.

File 348: EUROPEAN PATENTS 1978-2002/Oct W01
(c) 2002 European Patent Office
File 35: Dissertation Abs Online 1861-2002/Sep
(c) 2002 ProQuest Info&Learning
File 344: Chinese Patents Abs Aug 1985-2002/Oct
(c) 2002 European Patent Office
File 347: JAPIO Oct 1976-2002/Jun(Updated 021004)
(c) 2002 JPO & JAPIO

*File 347: JAPIO data problems with year 2000 records are now fixed.
Alerts have been run. See HELP NEWS 347 for details.

File 371: French Patents 1961-2002/BOPI 200209
(c) 2002 INPI. All rts. reserv.

*File 371: This file is not currently updating. The last update is 200209.

Set	Items	Description
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2/9/1 (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

13556958 22051209 PMID: 12056482
Protection evaluation against *Chlamydophila abortus* challenge by DNA
vaccination with a dnaK-encoding plasmid in pregnant and non-pregnant
mice.

Hechard Celine; Grepinet Olivier; Rodolakis Annie
Unite de Pathologie Infectieuse et Immunologie, INRA. Centre de Tours,
Nouzilly, France.

Veterinary research (France) May-Jun 2002, 33 (3) p313-26, ISSN
0928-4249 Journal Code: 9309551

Document type: Evaluation Studies; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Mice were intramuscularly immunized with a dnaK-encoding DNA plasmid. The protective effect of DNA immunization against *Chlamydophila abortus* infection was studied in pregnant and non-pregnant mice models. In non-pregnant mice, the dnaK vaccine induced a specific humoral response with the predominant IgG2a isotype, which failed to have in vitro neutralizing properties. No delayed-type hypersensitivity reaction was observed and the spleens of dnaK vaccinated-mice were not protected against *C. abortus* challenge. In pregnant mice, the dnaK vaccine induced a non-specific partial protection from abortion. This may be due to the immunogenic properties of the Cpg motifs of bacterial DNA present in the vaccinal plasmid backbone. Nevertheless, spleens of dnaK vaccinated-pregnant mice were not protected.

Tags: Animal; Female; Pregnancy; Support, Non-U.S. Gov't

Descriptors: **Chlamydophila*--immunology--IM; **Chlamydophila* Infections
--veterinary--VE; *Heat-Shock Proteins 70--genetics--GE; *Vaccines, DNA
--administration and dosage--AD; Antibodies, Bacterial--biosynthesis--BI;

Chlamydophila--genetics--GE; Chlamydophila Infections --prevention and control--PC; Disease Models, Animal; Heat-Shock Proteins 70--immunology--IM; Immunoglobulin G--biosynthesis--BI; Immunoglobulin G--blood--BL; Injections, Intramuscular--veterinary--VE; Mice; Plasmids; Recombinant Proteins--genetics--GE; Recombinant Proteins--immunology--IM; Spleen --immunology--IM; Spleen--microbiology--MI; Vaccines, DNA--immunology--IM
CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Heat-Shock Proteins 70); 0 (Immunoglobulin G); 0 (Plasmids); 0 (Recombinant Proteins); 0 (Vaccines, DNA); 0 (dnaK protein)

Record Date Created: 20020611

2/9/2 (Item 2 from file: 155)
DIALOG (R) File 155: MEDLINE (R)

13493579 21906483 PMID: 11908999

Chlamydia vaccines : strategies and status.

Igielsetme Joseph U; Black Carolyn M; Caldwell Harlan D
Microbiology & Immunology, Morehouse School of Medicine, 720 Westview
Drive SW, Atlanta, Georgia 30310, USA. igietsj@msm.edu

BioDrugs : clinical immunotherapeutics, biopharmaceuticals and gene
therapy (New Zealand) 2002, 16 (1) p19-35, ISSN 1173-8804

Journal Code: 9705305

Contract/Grant No.: AI 41231; AI; NIAID; GM 08248; GM; NIGMS; RR 03034;
RR; NCRR

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

The ultimate goal of current chlamydial vaccine efforts is to utilise either conventional or modern vaccinology approaches to produce a suitable immunisation regimen capable of inducing a sterilising, long-lived heterotypic protective immunity at mucosal sites of infection to curb the severe morbidity and worldwide prevalence of chlamydial infections. This lofty goal poses tremendous challenges that include the need to clearly define the relevant effectors mediating immunity, the antigens responsible for inducing these effectors, the anti-chlamydial action(s) of effectors, and establishment of the most effective method of vaccine delivery. Tackling these challenges is further compounded by the biological complexity of chlamydia, the existence of multiple serovariants, the capacity to induce both protective and deleterious immune effectors, and the occurrence of asymptomatic and persistent infections. Thus, novel molecular, immunological and genetic approaches are urgently needed to extend the frontiers of current knowledge, and develop new paradigms to guide the production of an effective vaccine regimen. Progress made in the last 15 years has culminated in various paradigm shifts in the approaches to designing chlamydial vaccines. The dawn of the current immunological paradigm for antichlamydial vaccine design has its antecedence in the recognition that chlamydial immunity is mediated primarily by a T helper type1 (Th1) response, requiring the induction and recruitment of specific T cells into the mucosal microenvironment. Additionally, the ancillary role of humoral immune response in complementing the Th1-driven protective immunity, through ensuring adequate memory and optimal Th1 response during a reinfection, has been recognised. With continued progress in chlamydial genomics and proteomics, select chlamydial proteins, including structural, membrane and secretory proteins, are being targeted as potential subunit vaccine candidates. However, the development of an effective adjuvant, delivery vehicle or system for a potential subunit vaccine is still an elusive objective in these efforts. Promising delivery vehicles include DNA and virus vectors, bacterial ghosts and dendritic cells. Finally, a vaccine still represents the best approach to protect the greatest number of people against the ocular, pulmonary and genital diseases caused by chlamydial infections. Therefore, considering the urgency and the enormity of these challenges, a partially protective vaccine preventing certain severe sequelae would constitute an acceptable short-term goal to control Chlamydia. However, more research efforts and support are needed to achieve the worthy goal of protecting a significant number of the world's population from the devastating consequences of chlamydial invasion of the

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Chlamydia pneumoniae is an intracellularly growing bacterium that causes respiratory infections and is strongly associated with atherosclerosis. Antibodies against C. pneumoniae are frequently encountered in the adult population, indicating past exposure to the micro-organism. Immunity to reinfection is, however, only **partial** and does not prevent development of sequelae. Infections caused by and associated with C. pneumoniae are a major cause of morbidity and mortality world wide. Development of a vaccine capable of protecting against infections due to C. pneumoniae and their sequelae would prevent up to 10% of community-acquired pneumonias in adults and add a new dimension to the prevention of atherosclerosis and coronary heart disease. (64 Refs.)

Tags: Human; Support, Non-U.S. Gov't

Descriptors: *Bacterial Vaccines; *Chlamydia Infections--prevention and control--PC; *Chlamydophila pneumoniae--immunology--IM; Adult; Arteriosclerosis--microbiology--MI; Arteriosclerosis --prevention and control--PC; Chlamydia Infections--immunology--IM; Coronary Disease --microbiology--MI; Coronary Disease--prevention and control--PC; Respiratory Tract Infections--microbiology--MI; Respiratory Tract Infections--prevention and control--PC

CAS Registry No.: 0 (Bacterial Vaccines)

Record Date Created: 20000211

2/9/6 (Item 6 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

10203051 99171732 PMID: 10073724

Vaccination of mice with DNA plasmids coding for the Chlamydia trachomatis major outer membrane protein elicits an immune response but fails to protect against a genital challenge.

Pal S; Barnhart K M; Wei Q; Abai A M; Peterson E M; de la Maza L M
Department of Pathology, Medical Sciences I, University of California,
Irvine 92697-4800, USA.

Vaccine (ENGLAND) Feb 5 1999, 17 (5) p459-65, ISSN 0264-410X
Journal Code: 8406899

Contract/Grant No.: AI-30499; AI; NIAID; AI-32248; AI; NIAID

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

A DNA plasmid encoding the gene of the major outer membrane protein (MOMP) of the Chlamydia trachomatis mouse pneumonitis (MoPn) serovar and three plasmids containing the variable domains (VD) of the MOMP were constructed. Female mice were inoculated with the plasmids and 60 days later were challenged in the genital tract with C. trachomatis. Six weeks after challenge female mice were caged with male mice and the course of the mating followed. Mice immunized with the MOMP plasmids mounted weak humoral and cell mediated immune responses. However, following the genital challenge no significant differences in vaginal shedding were observed between the groups immunized with the MOMP and control plasmids. In addition, the fertility rates were similar in the experimental and negative control groups. In conclusion, vaccination with DNA plasmids encoding the MOMP elicited a modest immune response but did not protect against infection or disease.

Tags: Animal; Female; Male; Pregnancy; Support, U.S. Gov't, P.H.S.

Descriptors: *Bacterial Outer Membrane Proteins--immunology--IM; *Bacterial Vaccines--immunology--IM; *Chlamydia Infections--prevention and control--PC; *Chlamydia trachomatis--immunology--IM; *Genital Diseases, Female--prevention and control--PC; *Plasmids--immunology--IM; *Vaccines, DNA--immunology--IM; Antibodies, Bacterial--blood--BL; Bacterial Outer Membrane Proteins--genetics--GE; Genetic Vectors; Mice; Mice, Inbred Strains; Vaccination

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Bacterial Outer Membrane Proteins); 0 (Bacterial Vaccines); 0 (Genetic Vectors); 0

human mucosal epithelia. (210 Refs.)

Tags: Animal; Human; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
Descriptors: *Bacterial Vaccines--therapeutic use--TU; *Chlamydia
--immunology--IM; *Chlamydia Infections--drug therapy--DT; *Chlamydia
Infections--prevention and control--PC; *Technology, Pharmaceutical--trends
--TD; Bacterial Vaccines--administration and dosage--AD; Bacterial
Vaccines--chemical synthesis--CS; Bacterial Vaccines--immunology--IM;
Chlamydia Infections--immunology--IM; Drug Delivery Systems--methods--MT;
Drug Delivery Systems--trends--TD; Technology, Pharmaceutical--methods--MT
CAS Registry No.: 0 (Bacterial Vaccines)

Record Date Created: 20020322

2/9/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

11035453 20580045 PMID: 11137265

Immunity to Chlamydia pneumoniae induced by vaccination with DNA
vectors expressing a cytoplasmic protein (Hsp60) or outer membrane proteins
(MOMP and Omp2).

Penttila T; Vuola J M; Puurula V; Anttila M; Sarvas M; Rautonen N; Makela
P H; Puolakkainen M

Department of Virology, POB 21, Haartman Institute, University of
Helsinki, FIN-00014, Helsinki, Finland. tulla.penttila@helsinki.fi

Vaccine (ENGLAND) Dec 8 2000, 19 (9-10) p1256-65, ISSN 0264-410X

Journal Code: 8406899

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Immune responses induced by intramuscular DNA immunization with Chlamydia
pneumoniae genes coding for the major outer membrane protein (MOMP),
cysteine-rich outer membrane protein 2 (Omp2) or the heat shock protein 60
(Hsp60) were studied. BALB/c mice were vaccinated intramuscularly three
times at 3-week intervals and challenged intranasally 2 weeks after the
last injection. Immunization with pmomp or phsp60 showed 1.2-1.5 log
reduction in the mean lung bacterial counts after the challenge. Specific
antibodies were detected only in sera of the mice immunized with pomp2 and
phsp60. Although immunization with pomp2 resulted in a strong serum
antibody response against Omp2 protein, it failed to protect the mice.
Immunization with any of the three vaccines did not reduce the severity of
histologically assessed pneumonia, but resulted in significantly higher
lymphoid reaction in the lung indicating immunological memory.

Tags: Animal; Female; Support, Non-U.S. Gov't

Descriptors: *Bacterial Outer Membrane Proteins--genetics--GE; *Bacterial
Vaccines--immunology--IM; *Chaperonin 60--genetics--GE; *Chlamydophila
pneumoniae--immunology--IM; *Vaccines, DNA--immunology--IM; Antibodies,
Bacterial--blood--BL; Bacterial Outer Membrane Proteins--immunology--IM;
COS Cells; Chaperonin 60--immunology--IM; Lymphocyte Transformation; Mice;
Mice, Inbred BALB C; Vaccination

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Bacterial Outer
Membrane Proteins); 0 (Bacterial Vaccines); 0 (Chaperonin 60); 0
(Vaccines, DNA); 0 (major outer membrane protein, C. pneumoniae)

Record Date Created: 20010118

2/9/5 (Item 5 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

10573200 20111561 PMID: 10646092

Vaccination against infections by Chlamydia pneumoniae.

Puolakkainen M; Makela P H

Haartman Institute, Department of Virology, University of Helsinki,
Finland. mirja.puolakkainen@helsinki.fi

Comptes rendus de l'Academie des sciences. Serie III, Sciences de la vie
(FRANCE) Nov 1999, 322 (11) p973-8, ISSN 0764-4469 Journal Code:
8503078

Document type: Journal Article; Review; Review, Tutorial

SYSTEM:OS - DIALOG OneSearch
File 440:Current Contents Search(R) 1990-2002/Oct 10
(c) 2002 Inst for Sci Info
File 345:Inpadoc/Fam.& Legal Stat 1968-2002/UD=200239
(c) 2002 EPO

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1/3/5 (Item 2 from file: 345)
DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat
(c) 2002 EPO. All rts. reserv.

15163549

Basic Patent (No,Kind,Date): CA 2307846 AA 19990603 <No. of Patents: 007>
CHLAMYDIA PNEUMONIAE GENOMIC SEQUENCE AND POLYPEPTIDES, FRAGMENTS THEREOF
AND USES THEREOF, IN PARTICULAR FOR THE DIAGNOSIS, PREVENTION AND
TREATMENT OF INFECTION (English; French)

Patent Assignee: GENSET SA (FR)

Author (Inventor): GRIFFAIS REMY (FR); ZAGURSKY ROBERT J (US); METCALF
BENJAMIN J (US); PEEK JOEL A (US); SANKARAN BANUMATHI (US); HOISETH
SUSAN K (US); FLETCHER LEAH D (US)

IPC: *C12N-015/31; C07K-019/00; A01K-067/027; A61K-039/118; C07K-016/12;
C07K-014/295; G01N-033/53; C12N-015/62; C12Q-001/68

CA Abstract No: *131(03)028638M;

Derwent WPI Acc No: *C 99-357842;

Language of Document: English

Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date
AU 9911702	A1	19990615	AU 9911702	A	19981120
BR 9814878	A	20001003	BR 98U14878	A	19981120
CA 2307846	AA	19990603	CA 2307846	A	19981120 (BASIC)
CN 1279717	T	20010110	CN 98811378	A	19981120
EP 1032674	A2	20000906	EP 98954662	A	19981120
WO 9927105	A2	19990603	WO 98IB1890	A	19981120
WO 9927105	A3	19991111	WO 98IB1890	A	19981120

Priority Data (No,Kind,Date):

FR 9714673 A 19971121
WO 98IB1890 W 19981120
US 107078 P 19981104

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\$0.69 Estimated cost File440
\$0.58 0.121 DialUnits File345
\$10.55 1 Type(s) in Format 3
\$10.55 1 Types
\$11.13 Estimated cost File345
OneSearch, 2 files, 0.161 DialUnits FileOS
\$0.21 TELNET
\$12.03 Estimated cost this search
\$12.03 Estimated total session cost 0.161 DialUnits

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US Pat
Derwent

Biosis
Reed

(Plasmids); 0 (Vaccines, DNA); 146409-23-6 (major outer membrane protein, Chlamydia trachomatis)
Record Date Created: 19990507

2/9/8 (Item 8 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

08733973 96088055 PMID: 8525685

Protective efficacy of a parenterally administered MOMP-derived synthetic oligopeptide vaccine in a murine model of Chlamydia trachomatis genital tract infection: serum neutralizing IgG antibodies do not protect against chlamydial genital tract infection.

Su H; Parnell M; Caldwell H D
Laboratory of Intracellular Parasites, NIAID, Rocky Mountain Laboratories, Hamilton, MT 59840, USA.

Vaccine (ENGLAND) Aug 1995, 13 (11) p1023-32, ISSN 0264-410X

Journal Code: 8406899

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

The protective efficacy of an alum-adsorbed, parenterally administered synthetic oligopeptide immunogen corresponding to antigenically common T-helper and neutralizing B-cell epitopes of the Chlamydia trachomatis major outer membrane protein was studied in a murine model of chlamydial genital tract infection. Mice produced high levels of anti-chlamydial serum IgG neutralizing antibodies following subcutaneous immunization with the alum-adsorbed oligopeptide. Lower but detectable levels of chlamydial specific IgG antibodies were found in vaginal washes. IgG1 was the predominant isotype present in sera and vaginal washes. Chlamydial-specific IgA was not present in either the sera or vaginal washes of immunized mice. Vaccinated and control mice were challenged intravaginally or intrauterinally with low, medium, or high doses of C. trachomatis serovar D challenge inocula. Protection was assessed by performing quantitative chlamydial cervico-vaginal cultures over the course of the infection period. There were no statistically significant differences between groups of immunized and control mice in either colonization, shedding, or duration of infection. These findings demonstrate that parenteral immunization with the oligopeptide (serum-neutralizing antibodies) is **ineffective** in preventing chlamydial genital tract infection. It is possible, since chlamydial infection is restricted to the genital tract mucosae, that a more accurate evaluation of the oligopeptide vaccine potential will require local rather than systemic immunization.

Tags: Animal; Female

Descriptors: *Antibodies, Bacterial--biosynthesis--BI; *Bacterial Outer Membrane Proteins--immunology--IM; *Bacterial Vaccines--immunology--IM; *Chlamydia Infections--prevention and control--PC; *Chlamydia trachomatis--immunology--IM; *Immunoglobulin G--blood--BL; *Vaccines, Synthetic--immunology--IM; *Vaginal Diseases--prevention and control--PC; Administration, Intravaginal; Antibodies, Bacterial--blood--BL; Bacterial Vaccines--administration and dosage--AD; Chlamydia Infections--blood--BL; Immunoglobulin G--biosynthesis--BI; Immunoglobulin Isotypes--analysis--AN; Immunoglobulin Isotypes--blood--BL; Injections, Subcutaneous; Mice; Mice, Inbred A; Neutralization Tests; Oligopeptides--immunology--IM; Uterus; Vaccines, Synthetic--administration and dosage--AD; Vagina--immunology--IM; Vaginal Diseases--blood--BL

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Bacterial Outer Membrane Proteins); 0 (Bacterial Vaccines); 0 (Immunoglobulin G); 0 (Immunoglobulin Isotypes); 0 (Oligopeptides); 0 (Vaccines, Synthetic); 146409-23-6 (major outer membrane protein, Chlamydia trachomatis)

Record Date Created: 19960125

2/9/11 (Item 11 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

07238784 92180061 PMID: 1796460

The problems of vaccination against chlamydial abortion in sheep]
Zur Problematik der Vakzination gegen den Chlamydienabort beim Schaf.
Thiele D
Institut fur Hygiene und Infektionskrankheiten der Tiere,
Justus-Liebig-Universitat Giessen.
Tierarztliche Praxis (GERMANY) Dec 1991, 19 (6) p605-7, ISSN
0303-6286 Journal Code: 7501042
Document type: Journal Article; Review; Review, Tutorial ; English
Abstract

Languages: GERMAN
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Different vaccines used against chlamydial abortion in sheep are described. Problems associated with insufficient immunity after vaccination are discussed. Reasons for **failure** of certain vaccine preparations are addressed. Finally new developments in vaccine production are introduced which might be useful in solving problems still existing in the prevention of chlamydial abortion in sheep by vaccination. (24 Refs.)

Tags: Animal; Female; Pregnancy
Descriptors: *Abortion, Veterinary--prevention and control--PC;
*Bacterial Vaccines; *Chlamydia Infections--veterinary--VE; *Sheep Diseases
--prevention and control--PC; *Vaccination--veterinary--VE; Chlamydia
--immunology--IM; Chlamydia Infections--prevention and control--PC; Sheep
CAS Registry No.: 0 (Bacterial Vaccines)

Record Date Created: 19920406

2/9/12 (Item 12 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

06463504 90170744 PMID: 2407704
Efficacy of a vaccine to prevent Chlamydia - or Campylobacter-induced abortions in ewes.
Hansen D E; Hedstrom O R; Sonn R J; Snyder S P
College of Veterinary Medicine, Oregon State University, Corvallis
97331-4802.
Journal of the American Veterinary Medical Association (UNITED STATES)
Mar 1 1990, 196 (5) p731-4, ISSN 0003-1488 Journal Code: 7503067

Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

In a sheep flock, Chlamydia psittaci, Campylobacter fetus, *Ca jejuni*, and *Salmonella dublin* caused abortions. A vaccine that contained C psittaci type I from 2 sources: a cow with pneumonia and an aborted ovine fetus, *Ca fetus*, *Ca jejuni*, and 4 strains of K99 *Escherichia coli* was given to 240 ewes before they were bred. All fetuses, placentas, and lambs, that died within 36 hours of birth were examined for infectious agents. Of 55 abortions, 30 (55%) were caused by Chlamydia or Campylobacter spp; 25 of the 30 (83%) abortions took place in the nonvaccinated group (n = 240). Forty-five more lambs **survived** in the vaccinated group than in the nonvaccinated group. Abortion rates for Chlamydia and Campylobacter spp (2.1 vs 10.4% in vaccinated and nonvaccinated groups, respectively) were significantly different (P = 0.003). Abortion rates for *S dublin* were not significantly different between groups. The *Salmonella* epizootic was controlled quickly by sanitation and treatment procedures. The vaccine was at least 80% efficacious against Chlamydia and Campylobacter spp and appeared to be protective.

Tags: Animal; Female; Pregnancy
Descriptors: *Abortion, Veterinary--prevention and control--PC;
*Bacterial Vaccines; *Campylobacter Infections--veterinary--VE; *Ornithosis
--veterinary--VE; *Sheep Diseases--prevention and control--PC;
Campylobacter Infections--prevention and control--PC; Campylobacter fetus
--immunology--IM; Chlamydophila psittaci--immunology--IM; *Escherichia coli*
--immunology--IM; Ornithosis--prevention and control--PC; Sheep;
Vaccination--veterinary--VE
CAS Registry No.: 0 (Bacterial Vaccines)

Record Date Created: 19900405

2/9/15 (Item 1 from file: 65)

DIALOG(R)File 65:Inside Conferences

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03011062 INSIDE CONFERENCE ITEM ID: CN031896828

Detection of Cd4+ T-Cells in the Genital Tract of Mice Vaccinated with Formulated RMOMP that Confers Partial Protection Against Chlamydial Infertility

Maisonneuve, J.; Charlier, C.; Friede, M.; Abarca-Quinones, J.

CONFERENCE: European Society for Chlamydia Research-Meeting; 3rd

PROCEEDINGS-EUROPEAN SOCIETY FOR CHLAMYDIA RESEARCH, 1996; NO 3 P: 473
Uppsala, ESCR, 1996

LANGUAGE: English DOCUMENT TYPE: Conference Extended abstracts

CONFERENCE EDITOR(S): Stary, A.

CONFERENCE SPONSOR: European Society for Chlamydia Research
Austrian Society for Dermatology and Venerology Study Group
for STD and Dermatological Microbiology

CONFERENCE LOCATION: Vienna

CONFERENCE DATE: Sep 1996 (199609) (199609)

BRITISH LIBRARY ITEM LOCATION: 6699.453000

DESCRIPTORS: ESCR; chlamydia research; dermatological microbiology

2/9/16 (Item 2 from file: 65)

DIALOG(R)File 65:Inside Conferences

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01962028 INSIDE CONFERENCE ITEM ID: CN020438360

Intramuscular Immunization with a DNA Vaccine Produces Partial Immunity to Chlamydia trachomatis Infection

Zhang, D.-J.; Yang, X.; Shen, C.; Berry, J.

CONFERENCE: Modern approaches to the control of infectious diseases-
Annual meeting; 14th

VACCINES, 1997 P: 113-118

Cold Spring Harbor Laboratory Press, 1997

ISSN: 0899-4056 ISBN: 0879695161

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE EDITOR(S): Brown, F.

CONFERENCE LOCATION: Cold Spring Harbor, NY

CONFERENCE DATE: Sep 1996 (199609) (199609)

BRITISH LIBRARY ITEM LOCATION: 9138.650000

NOTE:

Also known as Vaccines 97

DESCRIPTORS: infectious diseases; vaccines

2/9/19 (Item 3 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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03983264 Supplier Number: 53053370 (THIS IS THE FULLTEXT)

Chlamydia Vaccine Nose Is Best Site for Chlamydia Vaccine .

Vaccine Weekly, pNA

Sept 28, 1998

ISSN: 1074-2921

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 502

TEXT:

The path to a chlamydia vaccine goes through the nose.

Animal studies show that Chlamydia trachomatis antigens administered by the intranasal route elicit the kind of immunity known to protect against chlamydia infection and disease.

"Intranasal immunization is a potential delivery route of choice in

the development of a vaccine against Chlamydia," concluded Joseph U. Igietseme of Morehouse School of Medicine, Atlanta, Georgia, and colleagues.

Igietseme et al. reported their findings in the journal *Infection and Immunity* ("Route of Infection that Induces a High Intensity of Gamma Interferon-Secreting T Cells in the Genital Tract Produces Optimal Protection against Chlamydia trachomatis Infection in Mice," *Infect Immun*, 1998;66(9):4030-5).

Chlamydia trachomatis is a sexually transmitted bacterial infection. Failure to diagnose and treat the insidious infection, which can remain asymptomatic for long periods of time, can result in pelvic inflammatory disease, ectopic pregnancy, and/or infertility. There are 4 million cases in the U.S. each year, representing yearly health-care costs of \$2.18 billion.

Igietseme et al. noted that a number of animal studies show that immune control of *C. trachomatis* infection requires T-cell mediated immune responses involving interferon gamma.

They hypothesized that vaccine elicitation of interferon gamma secreting T lymphocytes (ISTLs) in the genital tract would differ depending upon the route of vaccine administration.

The researchers used *C. trachomatis* elementary bodies (EBs) as a crude vaccine antigen for immunization of female BALB/c mice. They administered the antigen either intranasally, intravaginally, orally, or subcutaneously.

T-cells obtained from the animals' genital tracts were restimulated with chlamydial antigen in vitro and analyzed.

"The results suggested that immunization routes that foster rapid induction of vigorous genital mucosal cell-mediated immune (CMI) effectors (e.g., interferon gamma), the CMI-associated humoral effector, IgG2a, and to some extent secretory IgA produce immunity against chlamydial genital infection," Igietseme et al. reported.

One question unanswered by the study is whether chlamydial immunity induced by intranasal immunization can be long lasting.

"Of particular importance to chlamydial genital infection are the factors that regulate the persistence of immune effectors at the genital mucosal site and so foster long-term genital mucosal immunity," Igietseme et al. wrote. "The natures of such factors are presently unknown, but they will be important for the persistence of ISTLs in the genital mucosae."

The researchers currently are hoping to back-engineer a vaccine antigen by cloning interferon-secreting T lymphocytes from the genital tracts of intranasally immunized mice. It is hoped that these clones may help find the crucial protective chlamydial epitopes.

"The identification, mapping, and characterization of such protective epitopes may furnish valuable reagents for designing an experimental vaccine against Chlamydia," Igietseme et al. suggested.

This study was supported by Public Health Service grants AI41231 and RR03034 from the National Institutes of Health.

The corresponding author for this study is Joseph U. Igietseme, Morehouse School of Medicine, Department of Microbiology and Immunology, 720 Westview Dr., SW, Atlanta, GA 30310. Phone: (404) 752-1596. Fax: (404) 752-1179. Email: less than igietsj@msm.edu greater than .

- by Daniel J. DeNoon, Senior Editor

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PUBLISHER NAME: Charles W. Henderson

EVENT NAMES: *310 (Science & research)

GEOGRAPHIC NAMES: *1USA (United States)

PRODUCT NAMES: *2831210 (Vaccines for Human Use)

INDUSTRY NAMES: BUSN (Any type of business); HLTH (Healthcare - Medical and Health)

NAICS CODES: 325412 (Pharmaceutical Preparation Manufacturing)

2/9/36 (Item 1 from file: 35)

DIALOG(R) File 35:Dissertation Abs Online

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01743207 ORDER NO: AADAA-I9970077
• **Development of immune responses in mice to Chlamydia pneumoniae induced by intramuscular genetic vaccination**
Author: Tharp, Anthony C.
Degree: Ph.D.
Year: 2000
Corporate Source/Institution: Vanderbilt University (0242)
Director: William M. Mitchell
Source: VOLUME 61/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 1889. 89 PAGES
Descriptors: HEALTH SCIENCES, PATHOLOGY ; HEALTH SCIENCES, IMMUNOLOGY
Descriptor Codes: 0571; 0982
ISBN: 0-599-75065-0

Chlamydia pneumoniae, formerly known as TWAR, is a common respiratory tract pathogen which has been associated with 10 percent of diagnosed pneumoniae cases (1). Moreover, world-wide population studies have shown that *C. pneumoniae* is ubiquitous and that re-infection is common (1). Recently, seroepidemiological and ultrastructural studies have associated this pathogen with atherosclerotic cardiovascular disease (2). Atherosclerosis and its complications (i.e., myocardial infarct, ischemic heart disease, and stroke) account for more than 50 percent of deaths in the United States (3). Evidence of *C. pneumoniae* being a risk factor was documented during a five-year follow-up of patients being treated for coronary heart disease (CHD). This study documented elevated sera IgA titers against *C. pneumoniae* lipopolysaccharide (LPS) that correlated with an increased risk for CHD (4). Evidence for *C. pneumoniae*'s role in acute myocardial infarcts was documented with 57 percent of these patients having circulating immune complexes containing Chlamydial antigen (LPS) as compared to 12 percent of controls (5).

Although standard antimicrobial therapy is believed to be effective, *C. pneumoniae* infections are usually silent or mildly symptomatic, and therefore not treated, leading to a chronic, persistent infection (6). No studies have been reported that specifically target chronic *C. pneumoniae* for antibiotic eradication. Excessive costs of antibiotic treatment, the necessity of testing large populations, and the potential for drug-resistant strains to develop with therapy are potential problems with treating this pathogen. However, the potential costs of leaving the organism untreated if leading to atherosclerosis is also enormous. Although there is not an effective vaccine currently, one may be designed to offer protection. In this thesis the hypothesis that genetic DNA vaccination in the mouse model using the major outer membrane protein (MOMP) of *C. pneumoniae* as the cellular expressed antigen, will result in an effective vaccine. Genetic vaccination using a plasmid containing MOMP will be tested with a comparison between unmodulated DNA, enhancement by the method of Hormone Immunomodulated Genetic Vaccination (HIGV), and recombinant MOMP for protective efficacy. Systemic humoral and cellular responses to the vaccine will be measured and correlated with protective efficacy.

2/9/37 (Item 2 from file: 35)
DIALOG(R) File 35:Dissertation Abs Online
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01404150 ORDER NO: AADAA-I9510389
EXPRESSION OF THE CHLAMYDIA PSITTACI MAJOR OUTER MEMBRANE PROTEIN IN ESCHERICHIA COLI: A MODEL FOR TRANSLOCATION AND VACCINE DEVELOPMENT

Author: DASCHER, CHRISTOPHER CARTER
Degree: PH.D.
Year: 1994
Corporate Source/Institution: THE UNIVERSITY OF ROCHESTER (0188)
Supervisor: PATRIK BAVOIL
Source: VOLUME 55/11-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 4693. 193 PAGES
Descriptors: BIOLOGY, MICROBIOLOGY
Descriptor Codes: 0410

• Chlamydia infections represent a serious ongoing health problem throughout the world. The major outer membrane protein (MOMP) of Chlamydia species is an abundant component of the chlamydial outer membrane and is the target of neutralizing antibodies in infected individuals. The entire *omp1* gene encoding MOMP from *Chlamydia psittaci* strain GPIC has been cloned and expressed in *Escherichia coli*. A tightly regulated T7 promoter is used to control expression of the protein in *E. coli*. Upon induction of expression, the precursor MOMP (pre-MOMP) is synthesized in the cell. This is followed by the appearance of a lower molecular weight protein that comigrates with mature MOMP from chlamydial elementary bodies on both one-dimensional SDS-PAGE and two-dimensional gels. MOMP is not detected in surface labeling experiments using several MOMP-specific antibodies. In addition, MOMP expressed in *E. coli* is not accessible to protease treatment without prior permeabilization of the outer membrane. These data indicate that pre-MOMP is translocated to the periplasmic space and processed but is not surface-exposed in *E. coli*.

Biochemical and genetic techniques have been used to characterize the chlamydial homolog of Hsp60. Coexpression in *E. coli* of MOMP or a MOMP-PhoA fusion with Hsp60, or other chaperones, does not alter the level of MOMP translocation. The Hsp60 protein from *C. psittaci* was purified from isolated organisms. Hsp60 was investigated for the presence of intermolecular complexes with translocated chlamydial proteins. Chlamydial Hsp60 can function in trans to suppress a lethal temperature sensitive mutation of a cytoplasmic protein in *E. coli*.

Highly purified recombinant MOMP and Omp2, another cysteine-rich chlamydial outer membrane protein, were generated. These proteins were used in immunological studies of protective chlamydial antigens. Only MOMP could prime a protective antibody response in BALB/c mice. C3H/HeJ mice, a strain non-responsive to MOMP, failed to elicit protective antibodies using various combinations of recombinant MOMP and Omp2 as immunogens. An attenuated *Salmonella typhimurium* strain was used to deliver both MOMP and Omp2 by oral immunization but was unsuccessful in eliciting anti chlamydial antibodies.

?t s2/3,kwic/31 32

2/3,KWIC/31 (Item 9 from file: 654)
DIALOG(R) File 654:US PAT.FULL.
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3230019 **IMAGE Available
Derwent Accession: 1991-245693

Utility

C/ Nucleotide, deduced amino acid sequence, isolation and purification of heat-shock chlamydial proteins; DETECTION; VACCINE AGAINST CHLAMYDIA INFECTION

Inventor: Morrison, Richard P., Hamilton, MT
Caldwell, Harlan D., Hamilton, MT

Assignee: The United State of America as represented by the Department of Health and Human Services (06), Washington, DC
U S of America Health & Human Services (Code: 06814)

Examiner: Moskowitz, Margaret (Art Unit: 186)

Assistant Examiner: Cunningham, Thomas

Law Firm: Cushman, Darby & Cushman

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5071962	A	19911210	US 90531317	19900531
Priority				US 90531317	19900531
Nucleotide, deduced amino acid sequence, isolation and purification of heat-shock chlamydial proteins					

Description of the Invention:

...*C. psittaci* (GPIC) genomic DNA isolated from 6X10¹⁰ IFU, was partially digested with Sau3A, and sized by electrophoresis on a 0.7% agarose gel (Nano, et...

...50 kD, presumably a truncated version of the 57-kD protein found in

pGP57. A **partial** sequence of the 2.0-kb chlamydial DNA fragment from the E1 subclone was obtained...the manufacturer's suggested procedures (Sequenase, United States Biochemical Corp., Cleveland, Ohio). After obtaining a **partial** DNA sequence from the E1 subclone, sequencing was continued using synthetic oligonucleotide primers (SAM1, Milligen... immune guinea pigs (Watkins, *supra*). Since a major genus-specific constituent of this extract (LPS) **failed** to induce ocular hypersensitivity, the extract was purified using immunoaffinity chromatography to obtain the 45...organisms, lanes 1 and 5, and the recombinant HypB proteins, lanes 2 and 4, but **failed** to react with the homologous protein found in *E. coli*. (lane 3...).

2/3, KWIC/32 (Item 10 from file: 654)

DIALOG(R) File 654:US PAT.FULL.

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2422624

Derwent Accession: 1982-41396E

Utility

EXPIRED

C/ **Vaccine against chlamydous infections of farm animals; INACTIV ED SUSPENS ION OF CELLS OF EGG YOLKS**

Inventor: Kurbanov, Ildus A., Nauchny gorodok, 1, kv. 6, Kazan, SU
Jusupov, Rasikh K., Nauchny gorodok, 1, kv. 35, Kazan, SU
Borovik, Roman V., ulitsa Lunacharskogo, 37, kv. 9, Serpukhov, Moskovskaya oblast, SU
Gabdulkhaev, Talgat G., Nauchny gorodok, 2, kv. 11, Kazan, SU
Kurbanova, Ilmira A., ulitsa Sibirskaia trakt, 8, kv. 47, Kazan, SU

Assignee: Unassigned

UNASSIGNED OR ASSIGNED TO INDIVIDUAL (Code: 68000)

Examiner: Rose, Shep K. (Art Unit: 125)

Law Firm: Burgess, Ryan and Wayne

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 4328208	A	19820504	US 81265559	19810520
Priority				US 81265559	19810520

Vaccine against chlamydous infections of farm animals...

Description of the Invention:

...3) of the animals are not vaccinated. The control non-vaccinated animals (white mice) have **died**, while pregnant guinea pigs have aborted. The vaccinated white mice **survive**, while vaccinated pregnant guinea pigs give healthy brood...vaccinated heifers after the infection have aborted or brought before time weak, nonvital calves which **died** within three days after calving. In all of them the delay in afterbirth emission...

?logoff hold

15oct02 08:23:17 User228206 Session D1874.5

\$0.33 0.104 DialUnits File155

\$1.68 8 Type(s) in Format 9

\$1.68 8 Types

\$2.01 Estimated cost File155

\$0.02 0.009 DialUnits File10

\$0.02 Estimated cost File10

\$0.20 0.052 DialUnits File65

\$2.20 2 Type(s) in Format 9

\$2.20 2 Types

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\$0.02 Estimated cost File203

\$0.14 0.026 DialUnits File636

\$3.45 1 Type(s) in Format 9

\$3.45 1 Types

\$3.59 Estimated cost File636

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\$1.40 2 Type(s) in Format 3
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\$0.04 Estimated cost File348
\$0.14 0.035 DialUnits File35
\$4.60 2 Type(s) in Format 9
\$4.60 2 Types
\$4.74 Estimated cost File35
\$0.09 0.009 DialUnits File344
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\$0.10 0.009 DialUnits File347
\$0.10 Estimated cost File347
\$0.04 0.009 DialUnits File371
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OneSearch, 11 files, 0.477 DialUnits FileOS
\$0.21 TELNET
\$15.89 Estimated cost this search
\$15.89 Estimated total session cost 0.477 DialUnits

Status: Signed Off. (1 minutes)

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(c) 1999 AAAS
*File 370: This file is closed (no updates). Use File 47 for more current information.
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File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
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File 442:AMA Journals 1982-2002/Sep B2
(c) 2002 Amer Med Assn -FARS/DARS apply
*File 442: UDs have been adjusted to reflect the current months' data.
No data is missing.
File 444:New England Journal of Med. 1985-2002/Oct W2
(c) 2002 Mass. Med. Soc.
File 467:ExtraMED(tm) 2000/Dec
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*File 467: For information about updating status please see Help News467.

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S2	16	RD (unique items)
S3	0	AU=GRIFFALIS ? AND CHLAMYD?
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S5	27	AU=GRIFFAIS ? AND CHLAMYD?
S6	2	S5/1999:2002
S7	25	S5 NOT S6

?t s7/9/1-5

7/9/1 (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

09173308 97075916 PMID: 8918239
Choosing highly specific primers for the polymerase chain reaction using
the octomer frequency disparity method: application to Chlamydia
trachomatis.

Chenal V; Souque P; Markovits A; Griffais R
Laboratoire des Rickettsiales et des Chlamydiales, Institut Pasteur,
Paris, France.

Gene (NETHERLANDS) Oct 17 1996, 176 (1-2) p97-101, ISSN 0378-1119
Journal Code: 7706761

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

The eight-nucleotide sequence (octomer) at the 3' end of PCR primers is important to PCR specificity. We describe a correlation between the specificity of PCR primers used with human DNA and the frequency of the 3' octomer in a human database. We therefore applied a methodology (OFD) based on octomer frequency disparity to identify 16 PCR targets in the chromosome of the intracellular bacterium, *Chlamydia trachomatis* (Ct). In addition, the 16 sets of primers were tested with a standard procedure. All the primer pairs were highly specific for Ct and did not lead to non-specific amplification when used with human DNA. This work shows that the choice of specific PCR primers is possible using a method based on the statistical representativeness of octomers in genomes.

Tags: Human

Descriptors: *Chlamydia trachomatis*--genetics--GE; *DNA Primers;

*Polymerase Chain Reaction; Chromosomes, Bacterial; Oligodeoxyribonucleotides; Sensitivity and Specificity

CAS Registry No.: 0 (DNA Primers); 0 (Oligodeoxyribonucleotides)
Record Date Created: 19970107

7/9/2 (Item 2 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

08576774 95336475 PMID: 7612032

Amplification of plasmid and chromosome Chlamydia DNA in synovial fluid of patients with reactive arthritis and undifferentiated seronegative oligoarthropathies.

Bas S; Griffais R; Kvien T K; Glennas A; Melby K; Vischer T L
Research Laboratory, University Hospital, Geneva, Switzerland.
Arthritis and rheumatism (UNITED STATES) Jul 1995, 38 (7) p1005-13,
ISSN 0004-3591 Journal Code: 0370605

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: AIM; INDEX MEDICUS

OBJECTIVE. To investigate the hypothesis that whole bacteria might be found in the joints of patients with **Chlamydia** -associated reactive arthritis. **METHODS.** The presence of 2 plasmid- and 2 chromosome-specific sequences of **Chlamydia** DNA was investigated by amplification with the polymerase chain reaction, in synovial fluid (SF) samples from 71 patients with various arthropathies. **RESULTS.** **Chlamydia** DNA was found in SF samples from 22 patients. **CONCLUSION.** Whole **chlamydiae** are likely present in the SF of patients with **Chlamydia** -associated reactive arthritis.

Tags: Female; Human; Male

Descriptors: Arthritis, Reactive--microbiology--MI; * **Chlamydia**--genetics--GE; * **Chlamydia** Infections--microbiology--MI; *DNA, Bacterial--analysis--AN; *Synovial Fluid--microbiology--MI; Adolescence; Adult; Base Sequence; Blotting, Southern; **Chlamydia**--isolation and purification--IP; Chromosomes, Bacterial--chemistry--CH; DNA, Bacterial--chemistry--CH; DNA, Bacterial--genetics--GE; Gene Amplification; Middle Age; Molecular Sequence Data; Plasmids--genetics--GE; Polymerase Chain Reaction; Sensitivity and Specificity

CAS Registry No.: 0 (DNA, Bacterial); 0 (Plasmids)

Record Date Created: 19950814

7/9/3 (Item 3 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

06667492 90364279 PMID: 2168087

Synthesis of digoxigenin-labelled DNA probe by polymerase chain reaction: application to Epstein-Barr virus and Chlamydia trachomatis.

Griffais R; Andre P M; Thibon M

Laboratoire des Chlamydiales et Rickettsiales, Institut Pasteur, Paris, France.

Research in virology (FRANCE) May-Jun 1990, 141 (3) p331-5, ISSN 0923-2516 Journal Code: 8907469

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Descriptors: **Chlamydia** trachomatis--genetics--GE; *DNA Probes--biosynthesis--BI; *Digoxigenin; *Digoxin; *Herpesvirus 4, Human--genetics--GE; Blotting, Southern; DNA, Bacterial--analysis--AN; DNA, Viral--analysis--AN; Digoxin--analogs and derivatives--AA; Polymerase Chain Reaction

CAS Registry No.: 0 (DNA Probes); 0 (DNA, Bacterial); 0 (DNA, Viral); 1672-46-4 (Digoxigenin); 20830-75-5 (Digoxin)

Record Date Created: 19901004

7/9/4 (Item 4 from file: 155)
DIALOG(R) File 155: MEDLINE(R)

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File 440:Current Contents Search(R) 1990-2002/Oct 10
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File 345:Inpadoc/Fam.& Legal Stat 1968-2002/UD=200239
(c) 2002 EPO

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Cost is in DialUnits
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Set Items Description
S1 5 AU=GRIFFAIS ? (100N) CHLAMYD?
?t s1/3/5

1/3/5 (Item 2 from file: 345)
DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat
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15163549

Basic Patent (No,Kind,Date): CA 2307846 AA 19990603 <No. of Patents: 007>
CHLAMYDIA PNEUMONIAE GENOMIC SEQUENCE AND POLYPEPTIDES, FRAGMENTS THEREOF
AND USES THEREOF, IN PARTICULAR FOR THE DIAGNOSIS, PREVENTION AND
TREATMENT OF INFECTION (English; French)

Patent Assignee: GENSET SA (FR)

Author (Inventor): GRIFFAIS REMY (FR); ZAGURSKY ROBERT J (US); METCALF
BENJAMIN J (US); PEEK JOEL A (US); SANKARAN BANUMATHI (US); HOISETH
SUSAN K (US); FLETCHER LEAH D (US)

IPC: *C12N-015/31; C07K-019/00; A01K-067/027; A61K-039/118; C07K-016/12;
C07K-014/295; G01N-033/53; C12N-015/62; C12Q-001/68

CA Abstract No: *131(03)028638M;

Derwent WPI Acc No: *C 99-357842;

Language of Document: English

Patent Family:

Patent No	Kind	Date	AppliC No	Kind	Date
AU 9911702	A1	19990615	AU 9911702	A	19981120
BR 9814878	A	20001003	BR 98U14878	A	19981120
CA 2307846	AA	19990603	CA 2307846	A	19981120 (BASIC)
CN 1279717	T	20010110	CN 98811378	A	19981120
EP 1032674	A2	20000906	EP 98954662	A	19981120
WO 9927105	A2	19990603	WO 98IB1890	A	19981120
WO 9927105	A3	19991111	WO 98IB1890	A	19981120

Priority Data (No,Kind,Date):

FR 9714673 A 19971121

WO 98IB1890 W 19981120

US 107078 P 19981104

?logoff hold

06322703 90018831 PMID: 2678327
Detection of *Chlamydia trachomatis* by the polymerase chain reaction.
Griffais R ; Thibon M
Laboratoire des Chlamydiales et Rickettsiales, Institut Pasteur, Paris.
Research in microbiology (FRANCE) Feb 1989, 140 (2) p139-41, ISSN
0923-2508 Journal Code: 8907468
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Comparative Study; Human
Descriptors: *Chlamydia trachomatis*--isolation and purification--IP;
Bacteriological Techniques; *Chlamydia* Infections--diagnosis--DI;
Chlamydia trachomatis--genetics--GE; Fluorescent Antibody Technique;
Polymerase Chain Reaction
Record Date Created: 19891030

7/9/5 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00183025

IMPROVEMENTS RELATED TO TECHNIQUES FOR THE AMPLIFICATION OF NUCLEIC ACID
PERFECTIONNEMENTS APPORTES AUX TECHNIQUES D'AMPLIFICATION D'ACIDE NUCLEIQUE
Patent Applicant/Assignee:

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English Abstract

Improvement relating to techniques for the amplification of nucleic acids, in particular by polymerization chain reaction (PCR). Said process for the detection and/or the identification of a nucleic acid sequence or of a mixture of nucleic acid sequences once the biological sample has been placed in an appropriate solution in order to extract the nucleic acid or acids, includes the following steps: (1) the destruction of the 5' ends of the nucleic acid sequences with double strand which are present in the sample, by bringing said biological sample into contact with an appropriate reaction agent which is active at a temperature of between 37degrees - 42degreesC; (2) the actual amplification by bringing the resulting sample into contact with (1) appropriate reagents, in particular amplification initiators suitable for the amplification of the target sequence or sequences to be detected, in the presence of a heat-resistant polymerase DNA; (3) detection of the specific amplified target sequences.

AY34619
ID AAY34619 standard; Protein; 245 AA.
XX
AC AAY34619;
XX
DT 13-SEP-1999 (first entry)
XX
DE Chlamydia pneumoniae transmembrane protein sequence.
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
KW vaccine; neutralising epitope.
XX
OS Chlamydia pneumoniae.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-IB01890.
XX
PR 04-NOV-1998; 98US-0107078.
PR 21-NOV-1997; 97FR-0014673.
XX
PA (GEST) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-357842/30.
XX
PT Genome sequence of Chlamydia pneumoniae
XX
PS Page 639-640; Disclosure; 1912pp; English.
CC AAY34584-Y35879 represent the proteins encoded by all the open reading
CC frames in the complete genome (see AAX91990) of Chlamydia pneumoniae.
CC C. pneumoniae causes respiratory disease such as pneumonia and
CC bronchitis and is thought to be a contributing factor in heart
CC disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584-Y35879) can be used in
CC immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotides sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae.
XX
SQ Sequence 245 AA;

Query Match 42.4%; Score 241; DB 20; Length 245;
Best Local Similarity 100.0%; Pred. No. 2.3e-220;
Matches 241; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 328 KLNVALALLELGCDTPKLLEYITERLVQPHYNELTALSFSKGRTLQNWKRVNIIIVPQDPQ 387
Db 5 klnvalallelgcdtpklleyiterlvqphynelAlsfskgrtlqnwkrvniiivpqdpq 64
Qy 388 ERERLLSTTRGLEEQILTFLFRLPKEAYLPCIYKL LASOKTOLATT AISFLSHTSHQEAL 447
Db 65 ererlisttrgleeqiltflfrlpkaylpciyklasqktqlattaisflshtshqeal 124
Qy 448 DLLFQAAKLPGEPIIRAYADLAIYNLT KDP EKKRS LH DYAKKLIQETL LFVDTENQRPH 507
Db 125 dlfqaaaklpgepiirayadlaiynltdpekkrslhdyakkliqetllfvdtенqrph 184
Qy 508 SMPYLRYQVTPESRTKLM DILET LATS KSS EDIR LLIQLMTEGDAKNFPVLAGLLIKIV 567
Db 185 smpylryqvtpesrtkmlidletlatskssedirlliqlmtegdaknfpvlagllikiv 244
Qy 568 E 568
Db 245 e 245